hemorrhages and aneurysmal formation. Portions of arteries from recently dead animals of the same species may be transplanted successfully. Histologically and practically, the process is the same as in the above. It is also possible to transplant successfully portions of vessels, preserved in Lock's solution, physiological saline solution, or sterile water at a temperature of 0° to 1° C. The preserved vessels before transplantation show no noteworthy histological changes. Whether it lives or not has not yet been established. At any rate, after transplantation, according to the individual differences, it will be slowly resorbed and substituted by the body tissues. Finally, even dead portions of vessel may be transplanted with success. This is an interesting experiment, physiologically, since it shows that the presence of living vessel epithelium is not absolutely necessary to prevent intravascular thrombosis. Circular arteriovenous anastomosis is an operation which is easily carried out. The blood afterward flows peripheralward, while the resistance of the valves disappears. The question whether the blood flows back through the capillaries to the heart or through the anastomosis with the vein, is not yet solved.

Fibro-epithelial Tumors of the Mammary Gland.—GREENOUGH and SIMMONS (*Annals of Surgery*, 1911, liv, 517) say that a comparative study of the fibro-epithelial tumors of the breast shows that their relations one to another are very close, and justifies their being grouped together as in the Warren classification. The essential features of the tumors of the fibrous types is the presence of periductal fibrous tissue in more or less abundance about the gland ducts. This periductal fibrous tissue may vary in cell richness from normal fibrous tissue to myxomatous or sarcomatous tissue. The two types of tumor, however, with this exception, are so much alike that the sarcoma type may be well considered merely a modification of the benign fibroma. The periductal fibroma needs only excision of the tumor to effect a cure. For the periductal myxosarcoma, amputation of the breast is advised, without removal of the muscles or dissection of the axilla; the tumor is only locally malignant. The fibrocystadenoma group includes a few tumors of similar origin to the foregoing, which display, when examined by the microscope, a tendency to epithelial overgrowth. The diagnosis between fibrocystadenoma and periductal fibroma cannot be made with certainty before the removal of the tumor. This tendency to epithelial proliferation is encountered in other diseases of the breast, such as abnormal involution of cystic disease; and is an undoubted source of danger to the patient in adult life. For this reason complete removal of any fibro-epithelial tumor of the breast by early operation is the best treatment to be advised.

On Impacted Fracture Through and Near the Femoral Neck.—COPE (*Annals of Surgery*, 1911, liv, 682) says that impacted fracture of the neck of the femur (within the capsule) is by no means an uncommon occurrence. It results from direct violence applied over the trochanter major, and may permit of considerable voluntary and passive movement of the hip without crepitus. An unimpacted fracture resulting from indirect violence may occasionally be converted into an impacted fracture owing to an immediately subsequent fall upon the affected hip. The impaction may cause an atypical deformity, even sometimes simulating a dorsal dislocation. Fracture of the base of the neck is always primarily impacted; if the force applied is great, there are always secondary fractures, both horizontal and vertical, through the trochanter region. Persons with impacted fractures of the femoral neck or base of the neck may and often do walk about for some days after the accident. An impacted fracture of the base of the femoral neck may exist without appreciable shortening when the force is not sufficient to cause the trochanter region to be split up by the wedge-like cervix femoris.

THERAPEUTICS

UNDER THE CHARGE OF

SAMUEL W. LAMBERT, M.D.,

PROFESSOR OF APPLIED THERAPEUTICS IN THE COLLEGE OF PHYSICIANS AND SURGEONS, COLUMBIA UNIVERSITY, NEW YORK.

The Action of Iron and Arsenic as Remedies for Chlorosis.—Zwetkoff (*Zeitschrift f. Exper. Path. und Therap.*, 1911, ix, 393) compares the results obtained by the treatment of chlorosis with iron and arsenic alone with those obtained by treatment with iron and arsenic combined. The conclusions are as follows: The treatment of chlorosis with arsenic in the form of arsenous acid, either given by mouth or subcutaneously, does not result in an increase of the hemoglobin or of the number of red blood cells. The action of arsenic in chlorosis is in direct opposition to its effects in pernicious anemia. In the later disease the arsenic treatment is of the highest value. This difference of action of arsenic in these two diseases of the blood-forming organs is dependent upon some difference in the nature of the two diseases. The treatment of chlorosis with iron in the form of Blaud's pills results in a rapid increase of the hemoglobin and when the blood cells are diminished an increase in their number. This regeneration of the hemoglobin and of the red blood cells is not rapid as measured by the single weeks. The treatment of chlorosis with iron and arsenic combined gives a definitely increased improvement in comparison to the results obtained by the treatment of chlorosis with iron alone. The increase of the hemoglobin occurs more rapidly, and the number of red blood cells shows an increase of two or three times that obtained when iron alone is used. The arsenic is given in the form of arsenous acid, in doses of from 0.002 to 0.003 gram three times a day. These doses are combined with the ordinary doses of iron. Zwetkoff believes that the increased benefits derived from this combination of iron and arsenic is not only a question of the added action of arsenic to iron, but that it is to be explained on the ground that arsenic directly stimulates the bone marrow, that is being coincidently supplied with iron, to increased blood production.